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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,445	09/28/2001	Katsuya Anzai	YKI-0077	5332

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EXAMINER

MAGEE, THOMAS J

ART UNIT	PAPER NUMBER
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2811

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/966,445

Applicant(s)

ANZAI, KATSUYA

Examiner

Thomas J. Magee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections – 35 U.S.C. 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al. (US 6,420,200 B1) in view of Arai (US 6,369,507 B1) and Takayama et al. (US 5,986,632).

4. Regarding Claim 1, Yamazaki et al. disclose a semiconductor device, in which a thin film transistor and a first electrode of an element to be driven are electrically connected to each other by a wiring layer (37)(Figures 2 and 14), wherein the element to be driven comprises an emissive layer between a first and second electrode and the wiring layer (37) is connected to the thin film transistor through a contact hole formed on a first insulation layer (20) over the thin film transistor and is further, connected to a first electrode (51, Figure 14) of element to be driven which is formed on a second insulation layer (44) through a contact hole located above the wiring layer. In addition, Yamazaki

et al. disclose that the contact position between the wiring layer and the thin film transistor is horizontally distant from the contact position between the wiring layer and the element to be driven.

Yamazaki et al. do not explicitly disclose the use of a power supply or driver unit, although it would be obvious that a source of power and a driver circuit would be used for active operation of the system. Arai discloses the use of an organic electroluminescent device with a switching device and encompassing electrodes (Col. 19, lines 57 – 64). In like fashion, Takayama et al. disclose control and driver circuits for thin film transistors with associated light emissive elements (Col. 7, lines 4 – 32; Col. 8, lines 1 – 16). Further, the art is replete with disclosures of power supply and driver/control circuits for electroluminescent display devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Arai and Tokayama et al. with Yamazaki et al. to obtain a power and drive control circuit for controlling the element to be driven at fixed input line points.

5. Regarding Claim 2, Yamazaki et al. disclose a semiconductor device comprising a thin film transistor, in which the transistor and a corresponding element to be driven are electrically connected to each other by a wiring layer (37) (Figures 2 and 14), wherein the element to be driven comprises an emissive layer between a first and second electrode. Yamazaki et al. further disclose a contact hole (Figure 14) formed on an insu-

lation layer (45) above the wiring layer, wherein the wiring layer is connected through the contact hole to the first electrode (51) of the emissive element (47, Figure 2) is formed on top of the insulation layer and covering the contact hole whereby the contact hole region (around the electrode) is filled with a flattening layer (44) (Col. 8, lines 6 – 12) and the emissive layer and second electrode (49) above the first electrode and flattening layer.

Yamazaki et al. do not explicitly disclose the use of a power supply or driver unit, although it would be obvious that a source of power and a driver circuit would be used for active operation of the system. Arai discloses the use of an organic electroluminescent device with a switching device and encompassing electrodes (Col. 19, lines 57 – 64). In like fashion, Takayama et al. disclose control and driver circuits for thin film transistors with associated light emissive elements (Col. 7, lines 4 – 32 ; Col. 8, lines 1 – 16). Further, the art is replete with disclosures of power supply and driver/control circuits for electroluminescent display devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Arai and Tokayama et al. with Yamazaki et al. to obtain a power and drive control circuit for controlling the element to be driven at fixed input line points.

6. Regarding Claim 3, Yamazaki et al. disclose a semiconductor device comprising a thin film transistor for controlling power to an element to be driven, which includes an

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emissive layer between a first and second electrode (Figure 2), wherein the thin film transistor and element to be driven are directly or indirectly and electrically connected at a contact hole formed on an insulation layer (Figure 2) for separating thin film transistor and at a lower layer than element to be driven. Yamazaki additionally discloses that the first electrode (46) is formed on the insulation layer, covering the contact hole, where the recess of the first electrode covering the contact hole is in turn, covered by a flattening layer (44) and the emissive element layer (46) is formed above the first electrode and flattening layer.

Yamazaki et al. do not explicitly disclose the use of a power supply or driver unit, although it would be obvious that a source of power and a driver circuit would be used for active operation of the system. Arai discloses the use of an organic electroluminescent device with a switching device and encompassing electrodes (Col. 19, lines 57 – 64). In like fashion, Takayama et al. disclose control and driver circuits for thin film transistors with associated light emissive elements (Col. 7, lines 4 – 32 ; Col. 8, lines 1 – 16). Further, the art is replete with disclosures of power supply and driver/control circuits for electroluminescent display devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine Arai and Tokayama et al. with Yamazaki et al. to obtain a power and drive control circuit for controlling the element to be driven at fixed input line points.

7. Regarding Claims 4 – 6, Yamazaki et al. disclose (Col. 26, lines 23 – 29) that the element to be driven is an electroluminescent material that is an organic compound.

### ***Response to Arguments***

8. Arguments of Applicant in regard to Claims 1 – 3 have been carefully considered, but are moot in terms of the new ground(s) of rejection.

### ***Conclusions***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to **Thomas Magee**, whose telephone number is **(703) 305 5396**. The Examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM (EST). If attempts to reach the Examiner by telephone are unsuccessful, the

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examiner's supervisor, **Tom Thomas**, can be reached on **(703) 308-2772**. The fax number for the organization where this application or proceeding is assigned is **(703) 308-7722**.

Thomas Magee  
February 6, 2003

  
TOM THOMAS  
SUPERVISORY PATENT EXAMINER  
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